

Electrically Stable Conductive Filler-Su8-Glycidol Polymer Nanocomposite Element Having Piezoresistive Or Piezoelectric Properties And Method For Fabricating The Same

## ABSTRACT

Electrically stable conductive filler-SU8-glycidol polymer nanocomposite element having piezoresistive or piezoelectric properties and method for fabricating the same

The polymer nanocomposite element comprises a SU8-polymer back encapsulation layer formed on a substrate and a piezoresistive or piezoelectric nanocomposite layer formed on the back encapsulation layer and having a pair of electrical contacts. The piezoresistive or piezoelectric nanocomposite layer is formed with a mixture of 1 to 10% wt of a conductive filler nanoparticles and 5 to 40 % wt of glycidol (2,3-epoxy-1-propanol) dispersed in a SU8 polymer matrix of 50 to 94% wt.

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